

# Brightwater

TREATMENT SYSTEM

# Brightwater project embarks on next phases

The recent decision on where Brightwater facilities will be built marks the end of the siting process, but it's hardly the final step in the project. Brightwater staff will spend much of the next year completing facility design and getting permits in preparation for construction. Phased construction is scheduled to begin in late 2005.

Because there are still many decisions ahead for Brightwater, King County will continue to meet with business leaders, neighborhood groups, and elected officials as the project moves into permitting and design.

### **Permitting**

The Brightwater project is subject to several local, state, and federal regulations designed to protect the environment and mitigate impacts on the community during facility construction and operation. Compliance with these laws, statutes, and conditions initially takes place during the permitting process and continues through construction.

Before construction starts, King County will apply for permits with the appropriate agencies or jurisdictions. When a permit is issued, it outlines specific conditions under which King County is allowed to build and eventually operate Brightwater.

Permits issued by local jurisdictions might cover architectural guidelines, land use, building heights, construction work hours, noise restrictions, and impacts to local streets.

Permits at the state and federal level will have specific requirements for erosion control, waste disposal, shoreline use, and protection of water sources and surface waters. Local, state and federal permits also regulate construction in sensitive areas like protected habitat or wetlands.

Another function of permitting is to determine what mitigation might help address impacts of the Brightwater project. Mitigation will help minimize specific project-related impacts. Mitigation can take many forms, from creating parks or public meeting space to restoring wetlands and improving roads.

People can get involved during the permitting process in several ways. At the federal and state levels, some permits include a public comment period in which people can express their views and concerns. People can contact the local jurisdiction or federal or state agency directly for information on comment periods for Brightwater.

King County will use the mitigation requirements of permitting agencies and jurisdictions as well as the public comments heard during the siting process to prepare a mitigation plan later this spring. People will have an opportunity to comment on the mitigation plan.

A timeline on Page 2 shows when King County expects to apply for permits.

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# CONVEYANCE AND THE COMMUNITY

Brightwater facilities will include 16 miles of conveyance pipelines to carry wastewater to and from the plant. Most pipeline construction will take place in tunnels deep underground. People are unlikely to know pipeline construction is underway.

Construction activity will be noticeable at five areas called portals, the access shafts where workers and equipment will access the tunnels. What will it mean if a tunnel or a portal is in your community? How will conveyance construction activities affect residents and businesses? Come to a meeting to learn more.

Meetings will be held from 6:30 p.m. to 8:00 p.m.

Weds., March 24, 2004 Northshore Utility District office 6830 N.E. 185th Street Kenmore

**Tues., March 30, 2004**UW Bothell, Building 2,
Room 2005
18115 Campus Way N.E.
Bothell

Thurs., April 1, 2004 Shoreline Conference Center Shoreline Room 18560 First Ave. N.E. Shoreline

For additional information, or to arrange reasonable accommodations for people with disabilities, please contact the Brightwater project team (see Page 4).





Department of Natural Resources and Parks Wastewater Treatment Division



### Design

The community's role in shaping Brightwater design began during the siting process. In July 2002, people met with architects and design professionals to discuss their visions for the treatment plant. Architects are now using guidelines established during these workshops to design Brightwater in a way that reflects community needs and values.

a chance to list what types of

A process called value engineering is also important to design plans. An independent panel of engineering experts evaluates project plans. Value

engineering helps ensure the Brightwater design team has adequately analyzed project costs and requires the design team to provide justification for the engineering and construction methods it is considering.

People commented on preliminary designs during summer 2003, when engineers and architects gave detailed presentations about Brightwater engineering, construction methods, process technologies, landscaping and architecture. Design questionnaires gave people

> public space and community mitigation they would like to see built at the Brightwater site. Public comments are continuing to shape Brightwater's design possibilities.

Permanent facilities at the portal areas will also be attractively landscaped and designed to fit into the community (see above).

Work is underway in several areas during the design phase:

- Engineers must manage costs carefully while meeting operational standards.
- The project team works with permitting agencies to develop permit conditions for during and after construction to address community and environmental interests.
- Local jurisdictions determine appropriate mitigation to address impacts.
- Architects develop plans for attractive, appealing structures that meet engineering and community standards.

There are many ways people can learn more about Brightwater design. Visit the Web site at http://dnr.metrokc.gov/wtd/brightwater/ plantdesign/ to see artists' renderings and design concepts, and to fill out a design questionnaire. Or submit a comment on design possibilities using the mailback comment card on Page 4.

Brightwater Permitting Timeline							
Spring 2004	Apply for U.S. Army Corps of Engineers, Section 404 permit and state Department of Ecology, National Pollution Discharge and Elimination System Construction Stormwater Permit Local shoreline permit submittals to Kenmore and Snohomish County						
Summer 2004	Snohomish County Conditional Use Permit application Permit applications submitted to Washington Departments of Ecology, Natural Resources, Fish and Wildlife, and Transportation						
Late 2004 - Early 2005	Permit applications and consultations with Kenmore, Bothell, Snohomish County, Shoreline, Lake Forest Park, Woodway and Woodinville						
2005 to 2010	Construction of Brightwater						



# **Brightwater Frequently Asked Questions**

This is just a sample of the questions people often ask about Brightwater. See more on the project Web site: <a href="http://dnr.metrokc.gov/WTD/brightwater/">http://dnr.metrokc.gov/WTD/brightwater/</a> or contact the Brightwater project team for a paper copy.

# Q. I am currently on a septic system. Will I be required to hook up to Brightwater?

Individuals do not connect directly to King County's regional wastewater system. Local wastewater districts collect wastewater and contract with King County to convey and treat it at a regional treatment plant. The decision of where and when to build or extend service lines rests with the local wastewater districts and agencies. Wastewater treatment service is only provided within designated urban growth areas, with few exceptions. These are designated as part of the state Growth Management Act and local comprehensive plans. King County projects most homes and businesses within the urban growth boundary will have sewer service within the next two decades, but the exact timing would be up to the local agencies. Homes are generally not required to hook up to the sewer system if the septic system is working properly.

# Q. When will the construction start at my portal or along my alignment segment?

King County will begin purchasing property at the portal sites in 2004. Site preparation activities, such as fencing off property and grading the site surface, could begin as soon as property is acquired. Active construction along the conveyance pipeline corridor will begin in phases, possibly as early as 2005 or as late as 2008. King County has already begun working with immediate neighbors, local jurisdictions and the broader community to inform people about what to expect before, during, and after construction. For more information about conveyance, and to learn about upcoming meetings, visit the project Web site or contact the Brightwater project team.

Q. You talk about odor control at the treatment plant, but what about conveyance facilities? Brightwater's stringent odor control standards apply to off-site facilities too. Any portal location where air can be released will have an odor control facility to treat the air. Monitoring equipment will ensure the odor control facilities are working properly at all times.

# Did you know?

King County treats about 200 million gallons of wastewater every day for 18 cities, and 15 sewer districts throughout the region.

### The facilities include:

- Two regional treatment plants
- 42 pump stations
- 19 flow regulator stations
- 335 miles of conveyance pipelines

The conveyance pipelines range in diameter from 12 inches to 12 feet, and the oldest was built in 1906.

Brightwater is just one part of the Wastewater Treatment Division's plan to manage wastewater services over the next several decades.

### Video tour of Brightwater!

Learn about Brightwater landscaping and design as a member of the design team gives a guided tour of a scale model of the treatment plant site.

This seven-minute video can be viewed on the Web (high speed connection recommended) at http://dnr.metrokc.gov/wtd/brightwater/plantdesign/ or contact the Brightwater project team for a free video cassette.

Other sewer improvement projects include the Denny Way CSO project near Seattle Center, the Henderson/M.L. King CSO project in Rainier Valley, new pump stations in Juanita and Kirkland, and relining worn pipes running from Matthews Park to the University District. Storage and capacity improvements are being made in north and south King County.



# Wastewater treatment by design

Brightwater s purpose is to provide wastewater treatment to protect public health and water quality for future generations, but that s not its only function. Brightwater will also bring exciting environmental and community mitigation to the site through its attractively designed grounds, enhanced wildlife habitat, and opportunities for public uses.

Brightwater is being designed by a team of internationally acclaimed architects and design experts whose work includes the REI flagship store in downtown Seattle, the Public Domain of Homebush Bay at the Sydney 2000 Olympics, and IslandWood on Bainbridge Island. Community members helped establish the guidelines this team is using to develop Brightwater design.

The total area of the plant site is 114 acres, with treatment facilities expected to take up about 43 to 47 acres. Both the community and the design team felt it was important to make sure the plant was integrated into its rural surroundings. Architects separated plant facility buildings by stretches of forested landscape. This design element breaks down the overall scale of the plant and enhances what the community sees when looking at the site.

The community also placed a high priority on environmentally friendly plant design, and architects responded by developing design plans that would maximize the use of

Brightwater at Route 9 could offer community mitigation like open space and outdoor public use areas, walking paths, and a community center that residents, visitors, business groups and community groups would enjoy using.



indoor natural light and minimize reliance on natural resources during daily operation.

The salmon-bearing streams on and near the Brightwater site were of great concern to the community. One of the issues with the existing land uses on the site is that the auto wrecking yards, light industrial uses, and paved surfaces contribute to stormwater runoff that carries pollutants and dirt into Little Bear Creek and other surface waters. Brightwater architects created a design for a natural stormwater treatment system where runoff can be fed into basins and bio-swales where it will be cleaned and cooled before entering a constructed wetland and slowly flowing into Little Bear Creek. Salmon and other fish will benefit from this improvement.

Brightwater design plans also include transforming 60 acres of paved surfaces to less than 30 acres of paving, daylighting streams that currently run underground in pipes, and creating new habitat.

Landscaping and architecture that incorporates respect for the environment with community input will help ensure Brightwater is an attractive, well-designed site that people will want to visit.

In January and
February, the
Woodinville City Hall
displayed a three
dimensional model of
the Brightwater
Treatment Plant (above).
King County
provided a design
survey to encourage
people to submit
their ideas on
landscaping, trails,
and community space.

# Get involved in Brightwater

Community involvement continues to be an important part of the Brightwater project. We have an active speaker's bureau and welcome the opportunity to meet with your neighborhood association or community group to discuss the Brightwater project or other water quality issues. If you are interested in arranging a speaker for your next group meeting, please contact us.

# We also welcome your comments, concerns, or ideas

### E-mail

brightwater@metrokc.gov

#### **Phone**

206-684-6799, toll free at 1-888-707-8571 or 711 TTY

### Web site

http://www.dnr.metrokc.gov/ wtd/brightwater

### Fax

206-684-1741

### Mail

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### FOLD ON DASHED LINE AND TAPE SHUT. PLEASE DO NOT STAPLE.

The Brightwater plant site could feature community access through plant

interpretive walking trails among native plants and restored habitat. Woul you like to visit the Brightwater plant site? What types of activities or publ uses would you like to see considered in Brightwater design plans?	

### Projected Brightwater Timeline

2003	2004		2005		2006	2007	2008	2009	2010	
The Route 9 195th Street System alternative is selected	needed system	l unty gets permits; design is lized	constr	l ised ruction gins					conclude treatme system	ruction des with ent plant n testing tart up

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King Street Center KSC-NR-0503, 201 S. Jackson St.

Natural Resources and Parks

Wastewater Treatment Division Department of

# rightwate Wing County

- Next steps in the project
- Treatment plant design
- Come to a conveyance meeting



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calling the Wastewater Treatment with disabilities on request by alternative formats for individuals This information is provided in